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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/580,865		05/30/2000	Brian Unitt	476-1922	1155
7	7590	12/31/2003		EXAMINER	
William M L			PHAN, HANH		
BARNES & THORNBURG P O Box 2786				ART UNIT	PAPER NUMBER
Chicago, IL 60690-2786				2633	
				DATE MAILED: 12/31/2003	$, \iota \cup$

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)						
	09/580,865	UNITT ET AL.						
Office Action Summary	Examiner	Art Unit						
	Hanh Phan	2633						
The MAILING DATE of this communication app Period for Reply	ears on the cover si	neet with the correspondence a	ddress					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however within the statutory minimu will apply and will expire SIX cause the application to be	, may a reply be timely filed m of thirty (30) days will be considered time (6) MONTHS from the mailing date of this come ABANDONED (35 U.S.C. § 133).	aly. communication.					
1) Responsive to communication(s) filed on 30 M	<u>ay 2000</u> .							
2a) This action is <b>FINAL</b> . 2b) ☐ This	action is non-final.							
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4) Claim(s) 2,3,5,6,8,10,12,14-16,18,19,21 and 2	4-27 is/are pending	in the application.						
4a) Of the above claim(s) is/are withdraw								
5) Claim(s) <u>5,6,8,10,21,26 and 27</u> is/are allowed.								
6) Claim(s) 2,3,12,14,15,18,19,24 and 25 is/are re	ejected.							
7)⊠ Claim(s) <u>16</u> is/are objected to.								
8) Claim(s) are subject to restriction and/or	election requireme	ent.						
Application Papers								
9) The specification is objected to by the Examine	r.							
10) The drawing(s) filed on is/are: a) acce	epted or b) dobjec	ted to by the Examiner.						
Applicant may not request that any objection to the	drawing(s) be held in	abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct	ion is required if the d	rawing(s) is objected to. See 37 C	FR 1.121(d).					
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the at	tached Office Action or form P	TO-152.					
Priority under 35 U.S.C. §§ 119 and 120								
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list 13) Acknowledgment is made of a claim for domestic since a specific reference was included in the firs 37 CFR 1.78.  a) The translation of the foreign language pro 14) Acknowledgment is made of a claim for domestic reference was included in the first sentence of the Attachment(s)	s have been received a have been received ity documents have a (PCT Rule 17.2(a) of the certified copied priority under 35 Let sentence of the special application or priority under 35 Let priority u	ed. ed in Application No be been received in this Nationa ). es not received. J.S.C. § 119(e) (to a provisional pecification or in an Application has been received. J.S.C. §§ 120 and/or 121 since	al application) n Data Sheet. e a specific					
1) Notice of References Cited (PTO-892)		erview Summary (PTO-413) Paper No						
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449) Paper No(s)		tice of Informal Patent Application (PT er:	O-152)					

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#### **DETAILED ACTION**

1. This Office Action is responsive to the Amendment filed on 10/10/2003.

### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 2, 3 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Ota (US Patent No. 5,854,700).

Regarding claim 2, Ota discloses a passive optical coupler comprising a plurality of port pairs each port pair comprising an input port and a corresponding output port and wherein each input port is coupled to all output ports other than its corresponding output port (see Fig. 1, col. 3, lines 10-22).

Regarding claims 3 and 12, Ota discloses a communications access network comprising a passive optical coupler comprising a plurality of port pairs each port pair comprising an input port and a corresponding output port and wherein each input port is coupled to all output ports other than its corresponding output port (see Fig. 1, col. 3, lines 10-22).

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### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 14, 15, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota (US Patent No. 5,854,700) in view of Hortensius et al (US Patent No. 5,917,629).

Regarding claims 14, 24 and 25 Ota differs from claims 14, 24 and 25 in that he does not specifically teach a transmitter arranged to transmit data on a first optical frequency; a transmission detector arranged to receive, on the first optical frequency, signals from a network indicative of a transmission by another subscriber station on the first frequency; a medium access logic unit arranged to prevent transmission on the first frequency while the transmission detector is detecting said signals from a network indicative of a transmission by another subscriber station on the first frequency. However, referring to figure 1, Hortensius teaches a transmitter (24) arranged to transmit data on a first optical frequency (i.e., wavelength  $\lambda$ 2); a transmission detector (i.e., collision detector 30, Fig. 1) arranged to receive, on the first optical frequency, signals from a network indicative of a transmission by another subscriber station on the first frequency (col. 4, lines 34-45); a medium access logic unit (i.e., CSMA/CD protocol processor 28, Fig. 1) arranged to prevent transmission on the first frequency while the

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transmission detector is detecting said signals from a network indicative of a transmission by another subscriber station on the first frequency (col. 5, lines 3-67 and col. 6, lines 1-18). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the transmitter arranged to transmit data on a first optical frequency; a transmission detector arranged to receive, on the first optical frequency, signals from a network indicative of a transmission by another subscriber station on the first frequency; a medium access logic unit arranged to prevent transmission on the first frequency while the transmission detector is detecting said signals from a network indicative of a transmission by another subscriber station on the first frequency as taught by Hortensius in the system of Ota. One of ordinary skill in the art would have been motivated to do this since Hortensius suggests in column 5, lines 3-67 and col. 6, lines 1-18 that using such a transmitter arranged to transmit data on a first optical frequency; a transmission detector arranged to receive, on the first optical frequency, signals from a network indicative of a transmission by another subscriber station on the first frequency; a medium access logic unit arranged to prevent transmission on the first frequency while the transmission detector is detecting said signals from a network indicative of a transmission by another subscriber station on the first frequency have advantage of allowing determining if a collision has occurred upon the network

Regarding claim 15, the combination of Ota and Hortensius teaches the receiver arranged to receive data on a second optical frequency (Fig. 1 of Hortensius).

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6. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota (US Patent No. 5,854,700).

Regarding claims 18 and 19, it would have been obvious to obtain the transmission detector comprises a simple light detector and the light detector is a PIN diode in order to easy to detect a light wave and convert the light into the electricity and to increase the sensibility of the detector.

### Allowable Subject Matter

- 7. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 8. Claims 5, 6, 8, 10, 21, 26 and 27 are allowed.

## Response to Arguments

9. Applicant's arguments with respect to claims 2, 3, 12, 14-16, 18 and 19 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (703)306-5840.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (703)305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

Hanh Phan

12/24/2003